Reference Material - Data Summary Sheet

GP Batch: 1032-C-1

Product Type: Mixed Pasture Haylage/Baleage

Issue Date: 27 February 2026

Expiry Date: 31 May 2027

Test Name	n Labs	n Values	Mean	Uncertainty of Mean [1]	k	Methods
Aluminium (mg/kg)	3	9	422	+/- 52	2.31	Total Extraction
Boron (mg/kg)	5	14	10.2	+/- 0.5	2.16	Total Extraction
Calcium (%w/w)	5	14	0.767	+/- 0.022	2.16	Total Extraction
Carbon (%w/w)	4	11	43.9	+/- 0.6	2.23	Total Extraction
Cobalt (µg/kg)	3	8	231	+/- 8	2.36	Total Extraction
Copper (mg/kg)	5	13	6.30	+/- 0.11	2.18	Total Extraction
Iron (mg/kg)	5	15	329	+/- 12	2.14	Total Extraction
Magnesium (%w/w)	5	15	0.198	+/- 0.005	2.14	Total Extraction
Manganese (mg/kg)	5	15	149	+/- 4	2.14	Total Extraction
Molybdenum (µg/kg)	3	8	600	+/- 29	2.36	Total Extraction
Nitrate Nitrogen (mg/kg)	3	8	28.4	+/- 3.1	2.36	Total Extraction
Nitrogen (%w/w)	9	31	1.93	+/- 0.03	2.04	Total Extraction
Phosphorus (%w/w)	6	18	0.318	+/- 0.005	2.11	Total Extraction
Potassium (%w/w)	4	12	2.19	+/- 0.04	2.20	Total Extraction
Sodium (mg/kg)	5	13	2780	+/- 76	2.18	Total Extraction
Sulphur (%w/w)	6	16	0.239	+/- 0.006	2.13	Total Extraction
Zinc (mg/kg)	5	14	22.1	+/- 0.8	2.16	Total Extraction

[1] *Uncertainty of Mean is an expanded standard error of the mean (SEM) with a level of confidence of 95%. The coverage factor (k) is the critical value of Student's t distribution with n - 1 degrees of freedom. This uncertainty may only represent the measurement reproducibility of the data used. It does not include all known associated uncertainties and does not suggest that all methods used are statistically equivalent.*

Intended Use: For the verification of analytical methods used to determine attributes of Mixed Pasture Haylage/Baleage

Description: 20 g+ irradiated, packed in plastic jar

Homogeneity: This reference material has been assessed as homogeneous.

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Stability: An expiry period consistent with the shelf life of the unopened product and/or estimated from stability studies has been applied.

Storage: Keep samples dry and at a stable temperature (e.g. in air conditioned storage). Reseal containers immediately after each use. Do not store in sunlight.

Instructions for Use: Sample test portion size must be as stated in the method used in your laboratory; modification could invalidate the Reference values. Due to possible moisture reabsorption, re-dry the sample at 65°C to constant weight prior to analysis

Reference Values: The Mean is the simple mean excluding outliers; *n labs* is the number of laboratories who contributed results, and *n values* is the number of results used to calculate the mean. The uncertainty of the mean is the range within which the true mean of the population can be expected to lie with 95% confidence. This value is derived in accordance with the procedures described in ISO 33405:2024 "Reference materials - Approaches for characterization and assessment of homogeneity and stability".

Quality Statement: The values shown have been generated from data submitted in an inter-laboratory comparison programme (ILCP). The ILCP and reference material production are accredited to ISO/IEC 17043:2023 and ISO 17034:2016 respectively. Generation of this reference material also includes the requirements of ISO 33401 and 33405, which relate to production, characterisation and final product presentation.

Authorised by: Emily Hanna (Global P) - Key Technical Person



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